

Exhibit No. FVII
Docket No. R-2022- 3031340
Witness: Paul R. Moul

THE YORK WATER COMPANY
EXHIBIT
TO ACCOMPANY
THE DIRECT TESTIMONY
OF
PAUL R. MOUL, MANAGING CONSULTANT
P. MOUL & ASSOCIATES

May 27, 2022

The York Water Company
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The York Water Company
Summary Cost of Capital
for the Fully Projected Future Test Year Ending February 29, 2024

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	<u>54.77%</u>	11.25%	<u>6.16%</u>
Total	<u>100.00%</u>		<u>7.93%</u>

Indicated levels of fixed charge coverage assuming that the Company could actually achieve its overall cost of capital:

Pre-tax coverage of interest expense based upon a 28.8921% composite federal and state income tax rate (10.43% ÷ 1.77%)	5.89 x
Post-tax coverage of interest expense (7.93% ÷ 6.16%)	1.29 x

The York Water Company

Cost of Equity
as of March 31, 2022

Discounted Cash Flow (DCF)	D_1/P_0	⁽¹⁾	+	g	⁽²⁾	+	$lev.$	⁽³⁾	=	k
Water Group	1.81%		+	7.50%		+	1.46%		=	10.77%

Risk Premium (RP)	I	⁽⁴⁾	+	RP	⁽⁵⁾	=	k
Water Group	4.25%		+	6.75%		=	11.00%

Capital Asset Pricing Model (CAPM)	R_f	⁽⁶⁾	+	β	⁽⁷⁾	x	$(R_m - R_f)$	⁽⁸⁾	+	$size$	⁽⁹⁾	=	k
Water Group	3.00%		+	1.01		x	(10.24%)		+	1.02%		=	14.36%

Comparable Earnings (CE)	⁽¹⁰⁾	Historical	Forecast	Average
Comparable Earnings Group		13.1%	11.2%	12.15%

- References
- ⁽¹⁾ Schedule 7, page 1
 - ⁽²⁾ Schedule 9, page 1
 - ⁽³⁾ Schedule 10, page 1
 - ⁽⁴⁾ A-rated public utility bond yield comprised of a 2.75% risk-free rate of return (Schedule 13, page 2) and a yield spread of 1.25% (Schedule 11, page 3)
 - ⁽⁵⁾ Schedule 12, page 1
 - ⁽⁶⁾ Schedule 13, page 2
 - ⁽⁷⁾ Schedule 9, page 1
 - ⁽⁸⁾ Schedule 13, page 2
 - ⁽⁹⁾ Schedule 13, page 3
 - ⁽¹⁰⁾ Schedule 14, page 2

The York Water Company
Capitalization and Financial Statistics
2017-2021, Inclusive

	2021	2020	2019	2018	2017	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	\$ 299.0	\$ 266.8	\$ 235.2	\$ 219.6	\$ 209.5	
Short-Term Debt	\$ -	\$ -	\$ -	\$ 1.0	\$ 1.0	
Total Capital	<u>\$ 299.0</u>	<u>\$ 266.8</u>	<u>\$ 235.2</u>	<u>\$ 220.6</u>	<u>\$ 210.5</u>	
Market-Based Financial Ratios						Average
Price-Earnings Multiple	36 x	34 x	35 x	31 x	35 x	34 x
Market/Book Ratio	417.8%	403.3%	386.7%	333.9%	394.3%	387.2%
Dividend Yield	1.6%	1.7%	1.8%	2.1%	1.8%	1.8%
Dividend Payout Ratio	58.3%	57.2%	63.1%	65.0%	64.1%	61.5%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	49.0%	46.3%	43.0%	42.5%	43.0%	44.8%
Common Equity ⁽¹⁾	51.0%	53.7%	57.0%	57.5%	57.0%	55.2%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	49.0%	46.3%	43.0%	42.8%	43.3%	44.9%
Common Equity ⁽¹⁾	51.0%	53.7%	57.0%	57.2%	56.7%	55.1%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity ⁽¹⁾	11.5%	12.0%	11.1%	10.9%	11.1%	11.3%
Operating Ratio ⁽²⁾	57.6%	54.6%	53.9%	53.5%	53.7%	54.7%
Coverage incl. AFUDC ⁽³⁾						
Pre-tax: All Interest Charges	4.68 x	4.95 x	4.25 x	3.88 x	4.28 x	4.41 x
Post-tax: All Interest Charges	4.45 x	4.53 x	3.81 x	3.43 x	3.43 x	3.93 x
Coverage excl. AFUDC ⁽⁴⁾						
Pre-tax: All Interest Charges	4.43 x	4.84 x	4.18 x	3.84 x	4.11 x	4.28 x
Post-tax: All Interest Charges	4.20 x	4.41 x	3.74 x	3.39 x	3.26 x	3.80 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	7.2%	3.2%	2.5%	1.7%	6.7%	4.3%
Effective Income Tax Rate	6.2%	10.8%	13.5%	15.7%	25.9%	14.4%
Internal Cash Generation/Construction ⁽⁵⁾	47.7%	48.8%	76.9%	72.5%	57.3%	60.6%
Gross Cash Flow/ Avg. Total Debt ⁽⁶⁾	19.4%	22.3%	23.7%	22.4%	25.4%	22.6%
Gross Cash Flow Interest Coverage ⁽⁷⁾	6.15 x	6.21 x	5.46 x	4.73 x	5.04 x	5.52 x
Common Dividend Coverage ⁽⁸⁾	2.67 x	2.67 x	2.58 x	2.43 x	2.71 x	2.61 x

See Page 2 for Notes.

The York Water Company
Capitalization and Financial Statistics
2017-2021, Inclusive

Notes:

- (1) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
- (2) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (4) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (5) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (6) Gross Cash Flow plus interest charges divided by interest charges.
- (7) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: SEC Form 10-K
Utility COMPUSTAT

Water Group
Capitalization and Financial Statistics ⁽¹⁾
2017-2021, Inclusive

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	\$ 4,528.6	\$ 4,107.0	\$ 3,466.3	\$ 2,855.0	\$ 2,521.4	
Short-Term Debt	\$ 102.2	\$ 241.8	\$ 142.1	\$ 151.3	\$ 163.3	
Total Capital	<u>\$ 4,630.8</u>	<u>\$ 4,348.8</u>	<u>\$ 3,608.4</u>	<u>\$ 3,006.3</u>	<u>\$ 2,684.7</u>	
Market-Based Financial Ratios						<u>Average</u>
Price-Earnings Multiple	32 x	30 x	39 x	30 x	28 x	32 x
Market/Book Ratio	344.7%	311.6%	325.1%	299.2%	301.3%	316.4%
Dividend Yield	1.8%	2.0%	1.9%	2.1%	2.1%	2.0%
Dividend Payout Ratio	54.1%	56.9%	71.4%	60.6%	56.9%	60.0%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	50.6%	50.5%	48.8%	45.7%	45.1%	48.1%
Preferred Stock	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common Equity ⁽²⁾	<u>49.4%</u>	<u>49.4%</u>	<u>51.2%</u>	<u>54.3%</u>	<u>54.8%</u>	<u>51.8%</u>
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	51.8%	53.1%	50.4%	48.1%	48.3%	50.3%
Preferred Stock	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common Equity ⁽²⁾	<u>48.1%</u>	<u>46.9%</u>	<u>49.6%</u>	<u>51.8%</u>	<u>51.6%</u>	<u>49.6%</u>
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity ⁽²⁾	11.0%	10.5%	9.5%	10.0%	11.0%	10.4%
Operating Ratio ⁽³⁾	72.1%	71.0%	71.3%	69.0%	68.0%	70.3%
Coverage incl. AFUDC ⁽⁴⁾						
Pre-tax: All Interest Charges	4.21 x	3.99 x	3.67 x	3.77 x	4.70 x	4.07 x
Post-tax: All Interest Charges	3.86 x	3.65 x	3.31 x	3.35 x	3.50 x	3.53 x
Overall Coverage: All Int. & Pfd. Div.	3.85 x	3.64 x	3.30 x	3.33 x	3.48 x	3.52 x
Coverage excl. AFUDC ⁽⁴⁾						
Pre-tax: All Interest Charges	4.07 x	3.83 x	3.50 x	3.67 x	4.59 x	3.93 x
Post-tax: All Interest Charges	3.72 x	3.49 x	3.15 x	3.24 x	3.39 x	3.40 x
Overall Coverage: All Int. & Pfd. Div.	3.71 x	3.48 x	3.14 x	3.23 x	3.37 x	3.39 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	5.3%	6.1%	8.7%	5.1%	4.8%	6.0%
Effective Income Tax Rate	9.4%	10.9%	14.9%	15.9%	32.4%	16.7%
Internal Cash Generation/Construction ⁽⁵⁾	51.8%	50.3%	45.9%	50.8%	62.1%	52.2%
Gross Cash Flow/ Avg. Total Debt ⁽⁶⁾	16.7%	17.1%	17.4%	20.3%	24.8%	19.3%
Gross Cash Flow Interest Coverage ⁽⁷⁾	5.58 x	5.25 x	4.78 x	5.18 x	6.00 x	5.36 x
Common Dividend Coverage ⁽⁸⁾	3.24 x	3.28 x	2.91 x	3.30 x	3.86 x	3.32 x

See Page 2 for Notes.

Water Group
Capitalization and Financial Statistics
2017-2021, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Gross Cash Flow plus interest charges divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:

The Water Group companies have the following common characteristics: (i) they are listed in the "Water Utility Industry" section (basic and expanded editions) of The Value Line Investment Survey, and (ii) their stock is publicly traded.

Ticker	Company	Corporate Credit Ratings		Stock Traded	Value Line Beta
		Moody's	S&P		
AWR	American States Water	A2	A+	NYSE	0.65
AWK	American Water Works Co.	A3	A	NYSE	0.85
ARTNA	Artesian Resources Corp.	-	-	NASDAQ	0.70
CWT	California Water Serv. Grp.	-	A+	NYSE	0.65
WTRG	Essential Utilities, Inc.	Baa2	A	NASDAQ	0.95
MSEX	Middlesex Water Company	-	A	NASDAQ	0.70
SJW	SJW Corporation	-	A-	NYSE	0.80
YORW	York Water Company	-	A-	NASDAQ	0.85
Average		<u>A3</u>	<u>A</u>		<u>0.77</u>

Note: Ratings are those of utility subsidiaries

Source of Information: Utility COMPUSTAT
Moody's Investors Service
Standard & Poor's Corporation

Standard & Poor's Public Utilities
Capitalization and Financial Statistics ⁽¹⁾
2017-2021, Inclusive

	2021	2020	2019	2018	2017	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	\$ 40,154.3	\$ 38,732.9	\$ 36,461.6	\$ 32,871.6	\$ 30,827.6	
Short-Term Debt	\$ 1,397.4	\$ 1,154.1	\$ 1,221.9	\$ 1,420.3	\$ 1,076.1	
Total Capital	<u>\$ 41,551.7</u>	<u>\$ 39,887.0</u>	<u>\$ 37,683.5</u>	<u>\$ 34,291.9</u>	<u>\$ 31,903.7</u>	
Market-Based Financial Ratios						Average
Price-Earnings Multiple	22 x	23 x	20 x	21 x	20 x	21 x
Market/Book Ratio	219.9%	218.2%	220.9%	204.4%	214.4%	215.6%
Dividend Yield	3.5%	3.6%	3.2%	3.5%	3.3%	3.4%
Dividend Payout Ratio	72.9%	78.0%	62.7%	68.7%	65.2%	69.5%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	57.4%	58.1%	56.7%	55.0%	56.8%	56.8%
Preferred Stock	2.3%	2.6%	2.4%	2.5%	1.4%	2.2%
Common Equity ⁽²⁾	40.4%	39.4%	41.0%	42.5%	41.8%	41.0%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Based on Total Capital:						
Total Debt incl. Short Term	58.9%	59.4%	58.1%	57.0%	58.4%	58.3%
Preferred Stock	2.2%	2.5%	2.3%	2.4%	1.4%	2.1%
Common Equity ⁽²⁾	38.9%	38.1%	39.6%	40.7%	40.3%	39.5%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Rate of Return on Book Common Equity ⁽²⁾	9.4%	10.2%	10.3%	10.3%	9.4%	9.9%
Operating Ratio ⁽³⁾	83.1%	79.8%	79.3%	79.8%	77.0%	79.8%
Coverage incl. AFUDC ⁽⁴⁾						
Pre-tax: All Interest Charges	3.16 x	2.80 x	3.05 x	2.94 x	3.42 x	3.07 x
Post-tax: All Interest Charges	2.87 x	2.60 x	3.10 x	2.59 x	2.86 x	2.80 x
Overall Coverage: All Int. & Pfd. Div.	2.81 x	2.55 x	3.04 x	2.55 x	2.84 x	2.76 x
Coverage excl. AFUDC ⁽⁴⁾						
Pre-tax: All Interest Charges	3.06 x	2.70 x	2.95 x	2.84 x	3.31 x	2.97 x
Post-tax: All Interest Charges	2.78 x	2.50 x	3.00 x	2.48 x	2.75 x	2.70 x
Overall Coverage: All Int. & Pfd. Div.	2.72 x	2.46 x	2.94 x	2.44 x	2.73 x	2.66 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	7.4%	6.8%	6.0%	7.3%	7.3%	7.0%
Effective Income Tax Rate	10.6%	9.9%	12.2%	19.0%	28.2%	16.0%
Internal Cash Generation/Construction ⁽⁵⁾	60.5%	58.6%	65.9%	66.2%	78.7%	66.0%
Gross Cash Flow/ Avg. Total Debt ⁽⁶⁾	15.0%	15.9%	17.5%	17.4%	19.9%	17.1%
Gross Cash Flow Interest Coverage ⁽⁷⁾	5.17 x	4.90 x	4.97 x	4.98 x	5.57 x	5.12 x
Common Dividend Coverage ⁽⁸⁾	3.47 x	3.52 x	5.56 x	4.80 x	4.33 x	4.34 x

See Page 2 for Notes.

Standard & Poor's Public Utilities
Capitalization and Financial Statistics
2017-2021, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
- (7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders
Utility COMPUSTAT

Standard & Poor's Public Utilities
Company Identities

	Ticker	Credit Rating ⁽¹⁾		Common Stock Traded	Value Line Beta
		Moody's	S&P		
Alliant Energy Corporation	LNT	Baa1	A-	NYSE	0.85
Ameren Corporation	AEE	Baa1	BBB+	NYSE	0.80
American Electric Power	AEP	Baa1	A-	NYSE	0.75
American Water Works	AWK	Baa1	A	NYSE	0.85
CenterPoint Energy	CNP	Baa1	BBB+	NYSE	1.15
CMS Energy	CMS	A3	A-	NYSE	0.80
Consolidated Edison	ED	Baa1	A-	NYSE	0.75
Dominion Energy	D	A2	BBB+	NYSE	0.85
DTE Energy Co.	DTE	A2	A-	NYSE	0.95
Duke Energy	DUK	A2	BBB+	NYSE	0.85
Edison Int'l	EIX	Baa2	BBB	NYSE	0.95
Entergy Corp.	ETR	Baa1	BBB+	NYSE	0.95
Eversource	ES	A3	A	NYSE	0.90
Exelon Corp.	EXC	A2	BBB+	NYSE	0.95
FirstEnergy Corp.	FE	A3	BBB	NYSE	0.85
NextEra Energy Inc.	NEE	A1	A	NYSE	0.90
NiSource Inc.	NI	Baa2	BBB+	NYSE	0.85
NRG Energy Inc.	NRG	Ba1	BB+	NYSE	1.15
Pinnacle West Capital	PNW	A3	BBB+	NYSE	0.90
PPL Corp.	PPL	A3	A-	NYSE	1.10
Public Serv. Enterprise Inc.	PEG	A3	A-	NYSE	0.90
Sempra Energy	SRE	A3	BBB+	NYSE	0.95
Southern Co.	SO	Baa1	BBB+	NYSE	0.95
WEC Energy Corp.	WEC	A2	A-	NYSE	0.80
Xcel Energy Inc	XEL	A2	A-	NYSE	0.80
Average for S&P Utilities		<u>A3</u>	<u>BBB+</u>		<u>0.90</u>

Note: ⁽¹⁾ Ratings are those of utility subsidiaries

Source of Information: Moody's Investors Service, Inc.
S&P Global Inc.
The Value Line Investment Survey

The York Water Company
Capitalization and Related Capital Structure Ratios
Actual at December 31, 2021 and Estimated at February 29, 2024

	Actual at December 31, 2021			Estimated at February 29, 2024		
	Amount Outstanding	Ratios Excl. S-T Debt	Incl. S-T Debt	Amount Outstanding	Ratios Excl. S-T Debt	Incl. S-T Debt
Long-Term Debt	\$ 119,870,000	43.99%	39.72%	\$ 174,870,000 ⁽¹⁾	45.23%	44.92%
Common Equity						
Common stock	88,229,701			136,191,323 ⁽²⁾		
Retained earnings	64,392,117			75,585,783 ⁽³⁾		
Total Common Equity	152,621,818	56.01%	50.57%	211,777,106	54.77%	54.40%
Total Permanent Capital	272,491,818	100.00%	90.29%	386,647,106	100.00%	99.32%
Short-Term Debt	29,320,000		9.71%	2,653,353		0.68%
Total Capital Employed	\$ 301,811,818		100.00%	\$ 389,300,459		100.00%

Notes: ⁽¹⁾ Reflects changes in long-term debt as follows:

8.43% Senior Note maturity	\$ (7,500,000)
Senior Note issue 01/01/2019	30,000,000
Senior Note issue 02/01/2020	32,500,000
	<u>\$ 55,000,000</u>

⁽²⁾ Reflects changes in common stock related to:

Common Stock offering	\$ 43,000,000
Dividend Reinvestment, Stock Purchase & Employee Stock Purchase Plans	
2022	2,395,639
2023 and thru 02/29/2024	2,565,983
	<u>\$ 47,961,622</u>

⁽³⁾ Projection of retained earnings reflects:

Net income - 2022	\$ 16,156,738
Net income - 2023 and thru 02/29/2024	20,579,284
Common dividends - 2022	(10,792,659)
Common dividends - 2023 and thru 02/29/2024	(14,749,697)
	<u>\$ 11,193,666</u>

Source of Information: Company provided data

The York Water Company
Calculation of the Embedded Cost of Long-Term Debt
Actual at December 31, 2021

<u>Series</u>	<u>Date of Maturity</u>	<u>Principal Amount Outstanding</u> ⁽¹⁾	<u>Percent to Total</u>	<u>Effective Cost Rate</u>	<u>Weighted Cost Rate</u> ⁽²⁾
8.43%	12/18/22	\$ 7,500,000	6.26%	8.53%	0.53%
3.18%	10/01/29	12,000,000	10.01%	3.58%	0.36%
3.00%	10/01/36	10,500,000	8.76%	3.35%	0.29%
3.10%	11/01/38	14,870,000	12.41%	3.59%	0.45%
3.23%	10/01/40	15,000,000	12.51%	3.50%	0.44%
4.30%	06/01/45	10,000,000	8.34%	4.70%	0.39%
4.54%	01/31/49	20,000,000	16.69%	4.60%	0.77%
3.24%	09/30/50	30,000,000	25.03%	3.27%	0.82%
4.00%	12/01/52	-	0.00%	4.06%	0.00%
4.25%	12/01/53	-	0.00%	4.32%	0.00%
Total Long -Term Debt		<u>\$119,870,000</u>	<u>100.00%</u>		<u>4.05%</u>

Notes: ⁽¹⁾ Includes current portion of long-term debt.

⁽²⁾ As calculated on page 3 of this schedule.

Source of Information: Company provided data

The York Water Company
Calculation of the Embedded Cost of Long-Term Debt
Estimated at February 29, 2024

<u>Series</u>	<u>Date of Maturity</u>	<u>Principal Amount Outstanding</u> ⁽¹⁾	<u>Percent to Total</u>	<u>Effective Cost Rate</u>	<u>Weighted Cost Rate</u> ⁽²⁾
8.43%	12/18/22	\$ -	0.00%	8.53%	0.00%
3.18%	10/01/29	12,000,000	6.86%	3.58%	0.25%
3.00%	10/01/36	10,500,000	6.00%	3.35%	0.20%
3.10%	11/01/38	14,870,000	8.50%	3.59%	0.31%
3.23%	10/01/40	15,000,000	8.58%	3.50%	0.30%
4.30%	06/01/45	10,000,000	5.72%	4.70%	0.27%
4.54%	01/31/49	20,000,000	11.44%	4.60%	0.53%
3.24%	09/30/50	30,000,000	17.16%	3.27%	0.56%
4.00%	12/01/52	30,000,000	17.16%	4.06%	0.70%
4.25%	12/01/53	32,500,000	18.59%	4.32%	0.80%
Total Long -Term Debt		<u>\$174,870,000</u>	<u>100.00%</u>		<u>3.91%</u>

Notes: ⁽¹⁾ Includes current portion of long-term debt.

⁽²⁾ As calculated on page 3 of this schedule.

Source of Information: Company provided data

The York Water Company
Calculation of the Effective Cost of Long-Term Debt by Series

Series	Date of Issue	Date of Maturity	Principal Amount Issued	Premium/ Discount and Expense	Net Proceeds	Net Proceeds Ratio	Effective Cost Rate ⁽¹⁾
8.43%	12/15/92	12/18/22	\$ 7,500,000	\$ 81,274 ⁽²⁾	\$ 7,418,726	98.92%	8.53%
3.18%	05/07/08	10/01/29	12,000,000	712,585 ⁽³⁾	11,287,415	94.06%	3.58%
3.00%	10/08/19	10/01/36	10,500,000	474,801 ⁽⁴⁾	10,025,199	95.48%	3.35%
3.10%	10/08/19	11/01/38	14,870,000	1,004,682 ⁽⁵⁾	13,865,318	93.24%	3.59%
3.23%	10/01/19	10/01/40	15,000,000	604,631 ⁽⁶⁾	14,395,369	95.97%	3.50%
4.30%	07/23/15	06/01/45	10,000,000	542,646 ⁽⁷⁾	9,457,354	94.57%	4.70%
4.54%	01/31/19	01/31/49	20,000,000	177,014	19,822,986	99.11%	4.60%
3.24%	09/30/20	09/30/50	30,000,000	162,709	29,837,291	99.46%	3.27%
4.00% ⁽⁸⁾	12/01/22	12/01/52	30,000,000	300,000	29,700,000	99.00%	4.06%
4.25% ⁽⁸⁾	12/01/23	12/01/53	32,500,000	325,000	32,175,000	99.00%	4.32%

- Notes: ⁽¹⁾ The effective cost for each issue is the yield to maturity using as inputs the average term of issue, coupon rate, and net proceeds ratio.
- ⁽²⁾ Includes the actual issuance expenses of \$18,797, \$8,424 premiums paid to redeem the 8.625% Debentures, and unamortized debt issuance expense of \$2,970 (8.625% Debentures), \$2,417 (7% YCIDA Note), \$5,504 (7.125% YCIDA Note), and \$43,162 (8.0615% Water Facility Loans) which were all redeemed with the proceeds of the 8.43% Senior Note.
- ⁽³⁾ Includes additional issuance expenses of \$263,546 and \$449,039 remaining amortization associated with the refinancing of 2004 PEDFA Exempt Facilities Revenue Bonds, Series B of 2004, with PEDFA Exempt Facilities Revenue Bonds, Series A of 2008.
- ⁽⁴⁾ Includes additional issuance expenses of \$145,997 and \$328,804 remaining amortization associated with the refinancing of 2006 YCIDA Revenue Bonds, Series 2006, with 2019 PEDFA Exempt Facilities Revenue Refunding Bonds, Series A of 2019.
- ⁽⁵⁾ Includes additional issuance expenses of \$175,495 and \$829,187 remaining amortization associated with the refinancing of 2014 PEDFA Exempt Facilities Revenue Refunding Bonds, Series 2014, with 2019 PEDFA Exempt Facilities Revenue Refunding Bonds, Series B of 2019.
- ⁽⁶⁾ Includes additional issuance expenses of \$112,356 and \$492,275 remaining amortization associated with the refinancing of 2010A Monthly Senior Notes, Series 2010A, with 2019 Senior Notes.
- ⁽⁷⁾ Includes additional issuance expenses of \$298,297 and \$1,854 remaining amortization associated with the refinancing of 2004 PEDFA A Exempt Facilities Revenue Bonds with 2015 YCIDA Exempt Facilities
- ⁽⁸⁾ Estimated.

Source of Information: Company provided data

**Monthly Dividend Yields for
Water Group
for the Twelve Months Ending March 2022**

<u>Company</u>	<u>Apr-21</u>	<u>May-21</u>	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	<u>Oct-21</u>	<u>Nov-21</u>	<u>Dec-21</u>	<u>Jan-22</u>	<u>Feb-22</u>	<u>Mar-22</u>	<u>12-Month Average</u>	<u>6-Month Average</u>	<u>3-Month Average</u>
American States Water Co (AWR)	1.70%	1.69%	1.69%	1.66%	1.58%	1.71%	1.61%	1.55%	1.41%	1.59%	1.74%	1.64%			
American Water Works Co Inc (AWK)	1.55%	1.56%	1.57%	1.42%	1.32%	1.43%	1.39%	1.43%	1.28%	1.50%	1.60%	1.46%			
Artesian Resource Corp Class A (ARTNA)	2.60%	2.54%	2.85%	2.69%	2.65%	2.75%	2.68%	2.51%	2.32%	2.23%	2.30%	2.21%			
California Water Service Group (CWT)	1.57%	1.62%	1.66%	1.47%	1.45%	1.56%	1.52%	1.46%	1.28%	1.62%	1.76%	1.69%			
Essential Utilities, Inc. (WTRG)	2.14%	2.10%	2.20%	2.19%	2.16%	2.34%	2.29%	2.27%	2.00%	2.21%	2.28%	2.10%			
Middlesex Water Co (MSEX)	1.33%	1.27%	1.34%	1.07%	1.00%	1.06%	1.06%	1.13%	0.97%	1.15%	1.16%	1.10%			
SJW Corp (SJW)	2.08%	2.11%	2.16%	1.98%	1.96%	2.07%	2.07%	2.02%	1.86%	2.10%	2.21%	2.08%			
The York Water Co (YORW)	1.46%	1.50%	1.65%	1.56%	1.46%	1.72%	1.63%	1.67%	1.57%	1.72%	1.74%	1.74%			
Average	1.80%	1.80%	1.89%	1.76%	1.70%	1.83%	1.78%	1.76%	1.59%	1.77%	1.85%	1.75%	1.77%	1.75%	1.79%

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: <https://finance.yahoo.com/quote/>
<http://www.nasdaq.com>

Forward-looking Dividend Yield	1/2 Growth	D_0/P_0 1.75%	(.5g) 1.037500	D_1/P_0 1.82%	$K = \frac{D_0(1+g)^0 + D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^1}{P_0} + g$
	Discrete	D_0/P_0 1.75%	Adj. 1.046451	D_1/P_0 1.83%	$K = \frac{D_0(1+g)^{.25} + D_0(1+g)^{.50} + D_0(1+g)^{.75} + D_0(1+g)^{1.00}}{P_0} + g$
	Quarterly	D_0/P_0 0.4375%	Adj. 1.018245	D_1/P_0 1.79%	$K = \left[\left(1 + \frac{D_0(1+g)^{.25}}{P_0} \right)^4 - 1 \right] + g$
	Average			1.81%	
Growth rate				7.50%	
K				9.31%	

Historical Growth Rates
Earnings Per Share, Dividends Per Share,
Book Value Per Share, and Cash Flow Per Share

Company	Earnings per Share		Dividends per Share		Book Value per Share		Cash Flow per Share	
	Value Line		Value Line		Value Line		Value Line	
	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year
American States Water	8.50%	9.00%	8.00%	9.50%	6.00%	5.50%	4.50%	5.50%
American Water Works Co., Inc.	8.00%	10.50%	11.50%	11.00%	4.50%	3.50%	7.00%	8.00%
Artesian Res. Corp.	6.50%	-	3.00%	-	4.50%	-	5.50%	-
California Water Serv. Grp.	11.00%	6.50%	5.00%	3.50%	7.00%	6.00%	9.00%	6.50%
Essential Utilities, Inc.	1.00%	6.00%	7.00%	7.50%	14.00%	11.00%	3.00%	5.00%
Middlesex Water Company	11.00%	9.50%	6.00%	3.50%	9.00%	6.00%	9.50%	8.00%
SJW Corporation	-6.50%	6.00%	10.50%	6.50%	11.50%	9.00%	0.50%	6.00%
York Water Company	6.00%	6.00%	4.00%	3.50%	5.00%	4.50%	5.50%	6.00%
Average	<u>5.69%</u>	<u>7.64%</u>	<u>6.88%</u>	<u>6.43%</u>	<u>7.69%</u>	<u>6.50%</u>	<u>5.56%</u>	<u>6.43%</u>

Source of Information: Value Line Investment Survey, April 8, 2022

Earnings Per Share, Dividends Per Share,
Book Value Per Share, and Cash Flow Per Share

Water Group	I/B/E/S First Call	Zacks	Value Line				
			Earnings Per Share	Dividends Per Share	Book Value Per Share	Cash Flow Per Share	Percent Retained to Common Equity
American States Water	4.90%	NA	5.50%	9.00%	5.50%	5.50%	4.50%
American Water Works	8.30%	8.10%	7.50%	9.00%	8.00%	6.00%	4.00%
Artesian Resources Corp.	4.00%	NA	-	-	-	-	-
California Water Serv. Grp.	11.70%	NA	6.50%	6.50%	4.00%	2.00%	5.50%
Essential Utilities, Inc.	6.40%	6.10%	10.00%	8.00%	6.00%	10.00%	2.50%
Middlesex Water Company	2.70%	NA	4.50%	5.00%	2.00%	3.50%	6.00%
SJW Corporation	5.70%	NA	14.00%	5.50%	4.00%	2.50%	4.50%
York Water Company	4.90%	NA	5.00%	5.50%	2.50%	4.50%	5.00%
Average	6.08%	7.10%	7.57%	6.93%	4.57%	4.86%	4.57%

Source of Information : Yahoo First Call, March 30, 2022
Zacks, March 30, 2022
Value Line, April 8, 2022

Water Group
Financial Risk Adjustment

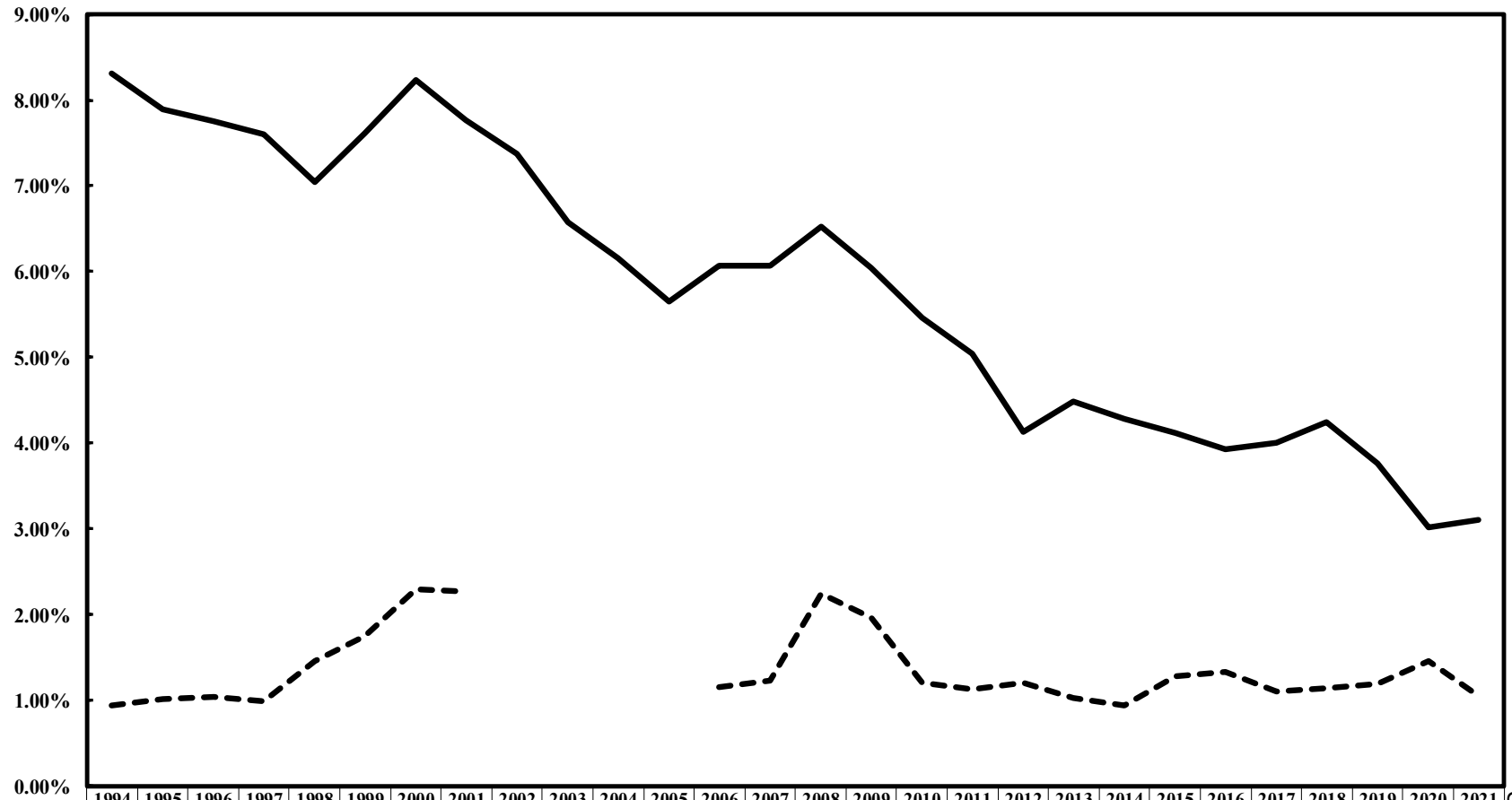
Exhibit No. FVII
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Schedule 10 [1 of 1]

Fiscal Year		American States Water Co (NYSE:AWR)	American Water Works Co. (NYSE:AWK)	Artesian Resources Corp (NDS:ARTNA)	California Water Service Group (NYSE:CWT)	Essential Utilities, Inc. (NYSE:WTRG)	Middlesex Water Co. (NDS:MSEX)	SJW Corp (NYSE:SJW)	The York Water Company (NDS:YORW)	Average
		12/31/21	12/31/21	12/31/21	12/31/21	12/31/21	12/31/21	12/31/21	12/31/21	
Capitalization at Fair Values										
	Debt(D)	\$665,352	\$11,818,000	\$163,182	\$1,338,831	\$6,482,499	\$320,081	\$1,651,825	\$168,000	2,825,971
	Preferred(P)	0	6,000	0	0	0	2,084	0	0	1,011
	Equity(E)	3,820,689	34,299,070	437,530	3,860,032	13,576,463	2,107,897	2,209,275	652,763	7,620,465
	Total	<u>\$4,486,041</u>	<u>\$46,123,070</u>	<u>\$600,712</u>	<u>\$5,198,863</u>	<u>\$20,058,962</u>	<u>\$2,430,062</u>	<u>\$3,861,100</u>	<u>\$820,763</u>	<u>10,447,446</u>
Capital Structure Ratios										
	Debt(D)	14.83%	25.62%	27.16%	25.75%	32.32%	13.17%	42.78%	20.47%	25.26%
	Preferred(P)	0.00%	0.01%	0.00%	0.00%	0.00%	0.09%	0.00%	0.00%	0.01%
	Equity(E)	<u>85.17%</u>	<u>74.36%</u>	<u>72.84%</u>	<u>74.25%</u>	<u>67.68%</u>	<u>86.74%</u>	<u>57.22%</u>	<u>79.53%</u>	<u>74.72%</u>
	Total	<u>100.00%</u>	<u>99.99%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>99.99%</u>
Common Stock										
	Issued	36,936,285	186,880,413	9,443,772	53,716,000	256,102,388	17,522,000	30,181,348	13,112,948	
	Treasury	0,000	5,269,324	0,000	0,000	3,234,765	0,000	0,000	0,000	
	Outstanding	36,936,285	181,611,089	9,443,772	53,716,000	252,867,623	17,522,000	30,181,348	13,112,948	
	Market Price	\$103.44	\$188.86	\$46.33	\$71.86	\$53.69	\$120.30	\$73.20	\$49.78	
Capitalization at Carrying Amounts										
	Debt(D)	\$590,288	\$10,396,000	\$144,850	\$1,060,986	\$5,947,357	\$311,128	\$1,522,955	\$149,190	YORK FPFT 174,870
	Preferred(P)	0	4,000	0	0	0	2,084	0	0	0
	Equity(E)	685,947	7,298,000	178,010	1,182,980	5,184,450	367,726	1,034,519	152,622	211,777
	Total	<u>\$1,276,235</u>	<u>\$17,698,000</u>	<u>\$322,860</u>	<u>\$2,243,966</u>	<u>\$11,131,807</u>	<u>\$680,938</u>	<u>\$2,557,474</u>	<u>\$301,812</u>	<u>386,647</u>
Capital Structure Ratios										
	Debt(D)	46.25%	58.74%	44.86%	47.28%	53.43%	45.69%	59.55%	49.43%	45.23%
	Preferred(P)	0.00%	0.02%	0.00%	0.00%	0.00%	0.31%	0.00%	0.00%	0.00%
	Equity(E)	<u>53.75%</u>	<u>41.24%</u>	<u>55.14%</u>	<u>52.72%</u>	<u>46.57%</u>	<u>54.00%</u>	<u>40.45%</u>	<u>50.57%</u>	<u>54.77%</u>
	Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
Betas		Value Line	0.65	0.85	0.70	0.65	0.95	0.70	0.80	0.85
										0.77
Hamada	BI	=	Bu	[1+	(1 - t)	D/E	+	P/E]	
	0.77	=	Bu	[1+	(1-0.21)	0.3381	+	0.0001]	
	0.77	=	Bu	[1+	0.79	0.3381	+	0.0001]	
	0.77	=	Bu	1.2672						
	0.61	=	Bu							
Hamada	BI	=	0.61	[1+	(1 - t)	D/E	+	P/E]	
	BI	=	0.61	[1+	0.79	0.8258	+	0.0000]	
	BI	=	0.61	1.6524						
	BI	=	1.01							
M&M	ku	=	ke	- (((	ku	-	i	)	1-t)
	8.06%	=	9.31%	- (((	8.06%	-	3.37%	)	0.79)
	8.06%	=	9.31%	- (((	4.69%			)	0.79)
	8.06%	=	9.31%	- ((	3.71%)		
	8.06%	=	9.31%	-	1.25%					
M&M	ke	=	ku	+ (((	ku	-	i	)	1-t)
	10.77%	=	8.06%	+ (((	8.06%	-	3.91%	)	0.79)
	10.77%	=	8.06%	+ (((	4.15%			)	0.79)
	10.77%	=	8.06%	+ ((	3.28%)		
	10.77%	=	8.06%	+	2.71%					

Interest Rates for Investment Grade Public Utility Bonds
Yearly for 2017-2021
and the Twelve Months Ended March 2022

<u>Years</u>	<u>Aa Rated</u>	<u>A Rated</u>	<u>Baa Rated</u>	<u>Average</u>
2017	3.82%	4.00%	4.38%	4.07%
2018	4.09%	4.25%	4.67%	4.34%
2019	3.61%	3.77%	4.19%	3.86%
2020	2.79%	3.02%	3.39%	3.07%
2021	2.97%	3.11%	3.36%	3.15%
Five-Year Average	<u>3.46%</u>	<u>3.63%</u>	<u>4.00%</u>	<u>3.70%</u>
<u>Months</u>				
Apr-21	3.13%	3.30%	3.57%	3.33%
May-21	3.17%	3.33%	3.58%	3.36%
Jun-21	3.01%	3.16%	3.41%	3.19%
Jul-21	2.80%	2.95%	3.20%	2.99%
Aug-21	2.82%	2.95%	3.19%	2.99%
Sep-21	2.84%	2.96%	3.19%	3.00%
Oct-21	2.99%	3.09%	3.32%	3.13%
Nov-21	2.91%	3.02%	3.25%	3.06%
Dec-21	3.01%	3.13%	3.36%	3.17%
Jan-22	3.19%	3.33%	3.57%	3.36%
Feb-22	3.56%	3.68%	3.95%	3.73%
Mar-22	3.81%	3.98%	4.28%	4.02%
Twelve-Month Average	<u>3.10%</u>	<u>3.24%</u>	<u>3.49%</u>	<u>3.28%</u>
Six-Month Average	<u>3.25%</u>	<u>3.37%</u>	<u>3.62%</u>	<u>3.41%</u>
Three-Month Average	<u>3.52%</u>	<u>3.66%</u>	<u>3.93%</u>	<u>3.70%</u>

Yields on A-rated Public Utility Bonds and Spreads over 30-Year Treasuries



— A-rated Public Utility	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
- - - Spread vs. 30-year	0.94	1.01	1.04	0.99	1.46	1.75	2.30	2.27					1.16	1.23	2.25	1.96	1.21	1.13	1.21	1.03	0.94	1.28	1.33	1.10	1.14	1.19	1.46	1.06

A rated Public Utility Bonds over 30-Year Treasuries

Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries		Year	A-rated Public Utility	30-Year Treasuries	
		Yield	Spread			Yield	Spread			Yield	Spread			Yield	Spread
Jan-99	6.97%	5.16%	1.81%	Jan-05	5.78%			Jan-11	5.57%	4.52%	1.05%	Jan-17	4.14%	3.02%	1.12%
Feb-99	7.09%	5.37%	1.72%	Feb-05	5.61%			Feb-11	5.68%	4.65%	1.03%	Feb-17	4.18%	3.03%	1.15%
Mar-99	7.26%	5.58%	1.68%	Mar-05	5.83%			Mar-11	5.56%	4.51%	1.05%	Mar-17	4.23%	3.08%	1.15%
Apr-99	7.22%	5.55%	1.67%	Apr-05	5.64%			Apr-11	5.55%	4.50%	1.05%	Apr-17	4.12%	2.94%	1.18%
May-99	7.47%	5.81%	1.66%	May-05	5.53%			May-11	5.32%	4.29%	1.03%	May-17	4.12%	2.96%	1.16%
Jun-99	7.74%	6.04%	1.70%	Jun-05	5.40%			Jun-11	5.26%	4.23%	1.03%	Jun-17	3.94%	2.80%	1.14%
Jul-99	7.71%	5.98%	1.73%	Jul-05	5.51%			Jul-11	5.27%	4.27%	1.00%	Jul-17	3.99%	2.88%	1.11%
Aug-99	7.91%	6.07%	1.84%	Aug-05	5.50%			Aug-11	4.69%	3.65%	1.04%	Aug-17	3.86%	2.80%	1.06%
Sep-99	7.93%	6.07%	1.86%	Sep-05	5.52%			Sep-11	4.48%	3.18%	1.30%	Sep-17	3.87%	2.78%	1.09%
Oct-99	8.06%	6.26%	1.80%	Oct-05	5.79%			Oct-11	4.52%	3.13%	1.39%	Oct-17	3.91%	2.88%	1.03%
Nov-99	7.94%	6.15%	1.79%	Nov-05	5.88%			Nov-11	4.25%	3.02%	1.23%	Nov-17	3.83%	2.80%	1.03%
Dec-99	8.14%	6.35%	1.79%	Dec-05	5.80%			Dec-11	4.33%	2.98%	1.35%	Dec-17	3.79%	2.77%	1.02%
Jan-00	8.35%	6.63%	1.72%	Jan-06	5.75%			Jan-12	4.34%	3.03%	1.31%	Jan-18	3.86%	2.88%	0.98%
Feb-00	8.25%	6.23%	2.02%	Feb-06	5.82%	4.54%	1.28%	Feb-12	4.36%	3.11%	1.25%	Feb-18	4.09%	3.13%	0.96%
Mar-00	8.28%	6.05%	2.23%	Mar-06	5.98%	4.73%	1.25%	Mar-12	4.48%	3.28%	1.20%	Mar-18	4.13%	3.09%	1.04%
Apr-00	8.29%	5.85%	2.44%	Apr-06	6.29%	5.06%	1.23%	Apr-12	4.40%	3.18%	1.22%	Apr-18	4.17%	3.07%	1.10%
May-00	8.70%	6.15%	2.55%	May-06	6.42%	5.20%	1.22%	May-12	4.20%	2.93%	1.27%	May-18	4.28%	3.13%	1.15%
Jun-00	8.36%	5.93%	2.43%	Jun-06	6.40%	5.15%	1.25%	Jun-12	4.08%	2.70%	1.38%	Jun-18	4.27%	3.05%	1.22%
Jul-00	8.25%	5.85%	2.40%	Jul-06	6.37%	5.13%	1.24%	Jul-12	3.93%	2.59%	1.34%	Jul-18	4.27%	3.01%	1.26%
Aug-00	8.13%	5.72%	2.41%	Aug-06	6.20%	5.00%	1.20%	Aug-12	4.00%	2.77%	1.23%	Aug-18	4.26%	3.04%	1.22%
Sep-00	8.23%	5.83%	2.40%	Sep-06	6.00%	4.85%	1.15%	Sep-12	4.02%	2.88%	1.14%	Sep-18	4.32%	3.15%	1.17%
Oct-00	8.14%	5.80%	2.34%	Oct-06	5.98%	4.85%	1.13%	Oct-12	3.91%	2.90%	1.01%	Oct-18	4.45%	3.34%	1.11%
Nov-00	8.11%	5.78%	2.33%	Nov-06	5.80%	4.69%	1.11%	Nov-12	3.84%	2.80%	1.04%	Nov-18	4.52%	3.36%	1.16%
Dec-00	7.84%	5.49%	2.35%	Dec-06	5.81%	4.68%	1.13%	Dec-12	4.00%	2.88%	1.12%	Dec-18	4.37%	3.10%	1.27%
Jan-01	7.80%	5.54%	2.26%	Jan-07	5.96%	4.85%	1.11%	Jan-13	4.15%	3.08%	1.07%	Jan-19	4.35%	3.04%	1.31%
Feb-01	7.74%	5.45%	2.29%	Feb-07	5.90%	4.82%	1.08%	Feb-13	4.18%	3.17%	1.01%	Feb-19	4.25%	3.02%	1.23%
Mar-01	7.68%	5.34%	2.34%	Mar-07	5.85%	4.72%	1.13%	Mar-13	4.20%	3.16%	1.04%	Mar-19	4.16%	2.98%	1.18%
Apr-01	7.94%	5.65%	2.29%	Apr-07	5.97%	4.87%	1.10%	Apr-13	4.00%	2.93%	1.07%	Apr-19	4.08%	2.94%	1.14%
May-01	7.99%	5.78%	2.21%	May-07	5.99%	4.90%	1.09%	May-13	4.17%	3.11%	1.06%	May-19	3.98%	2.82%	1.16%
Jun-01	7.85%	5.67%	2.18%	Jun-07	6.30%	5.20%	1.10%	Jun-13	4.53%	3.40%	1.13%	Jun-19	3.82%	2.57%	1.25%
Jul-01	7.78%	5.61%	2.17%	Jul-07	6.25%	5.11%	1.14%	Jul-13	4.68%	3.61%	1.07%	Jul-19	3.69%	2.57%	1.12%
Aug-01	7.59%	5.48%	2.11%	Aug-07	6.24%	4.93%	1.31%	Aug-13	4.73%	3.76%	0.97%	Aug-19	3.29%	2.12%	1.17%
Sep-01	7.75%	5.48%	2.27%	Sep-07	6.18%	4.79%	1.39%	Sep-13	4.80%	3.79%	1.01%	Sep-19	3.37%	2.16%	1.21%
Oct-01	7.63%	5.32%	2.31%	Oct-07	6.11%	4.77%	1.34%	Oct-13	4.70%	3.68%	1.02%	Oct-19	3.39%	2.19%	1.20%
Nov-01	7.57%	5.12%	2.45%	Nov-07	5.97%	4.52%	1.45%	Nov-13	4.77%	3.80%	0.97%	Nov-19	3.43%	2.28%	1.15%
Dec-01	7.83%	5.48%	2.35%	Dec-07	6.16%	4.53%	1.63%	Dec-13	4.81%	3.89%	0.92%	Dec-19	3.40%	2.30%	1.10%
Jan-02	7.66%	5.45%	2.21%	Jan-08	6.02%	4.33%	1.69%	Jan-14	4.63%	3.77%	0.86%	Jan-20	3.29%	2.22%	1.07%
Feb-02	7.54%	5.40%	2.14%	Feb-08	6.21%	4.52%	1.69%	Feb-14	4.53%	3.66%	0.87%	Feb-20	3.11%	1.97%	1.14%
Mar-02	7.76%			Mar-08	6.21%	4.39%	1.82%	Mar-14	4.51%	3.62%	0.89%	Mar-20	3.50%	1.46%	2.04%
Apr-02	7.57%			Apr-08	6.29%	4.44%	1.85%	Apr-14	4.41%	3.52%	0.89%	Apr-20	3.19%	1.27%	1.92%
May-02	7.52%			May-08	6.28%	4.60%	1.68%	May-14	4.26%	3.39%	0.87%	May-20	3.14%	1.38%	1.76%
Jun-02	7.42%			Jun-08	6.38%	4.69%	1.69%	Jun-14	4.29%	3.42%	0.87%	Jun-20	3.07%	1.49%	1.58%
Jul-02	7.31%			Jul-08	6.40%	4.57%	1.83%	Jul-14	4.23%	3.33%	0.90%	Jul-20	2.74%	1.31%	1.43%
Aug-02	7.17%			Aug-08	6.37%	4.50%	1.87%	Aug-14	4.13%	3.20%	0.93%	Aug-20	2.73%	1.36%	1.37%
Sep-02	7.08%			Sep-08	6.49%	4.27%	2.22%	Sep-14	4.24%	3.26%	0.98%	Sep-20	2.84%	1.42%	1.42%
Oct-02	7.23%			Oct-08	7.56%	4.17%	3.39%	Oct-14	4.06%	3.04%	1.02%	Oct-20	2.95%	1.57%	1.38%
Nov-02	7.14%			Nov-08	7.60%	4.00%	3.60%	Nov-14	4.09%	3.04%	1.05%	Nov-20	2.85%	1.62%	1.23%
Dec-02	7.07%			Dec-08	6.52%	2.87%	3.65%	Dec-14	3.95%	2.83%	1.12%	Dec-20	2.77%	1.67%	1.10%
Jan-03	7.07%			Jan-09	6.39%	3.13%	3.26%	Jan-15	3.58%	2.46%	1.12%	Jan-21	2.91%	1.82%	1.09%
Feb-03	6.93%			Feb-09	6.30%	3.59%	2.71%	Feb-15	3.67%	2.57%	1.10%	Feb-21	3.09%	2.04%	1.05%
Mar-03	6.79%			Mar-09	6.42%	3.64%	2.78%	Mar-15	3.74%	2.63%	1.11%	Mar-21	3.44%	2.34%	1.10%
Apr-03	6.64%			Apr-09	6.48%	3.76%	2.72%	Apr-15	3.75%	2.59%	1.16%	Apr-21	3.30%	2.30%	1.00%
May-03	6.36%			May-09	6.49%	4.23%	2.26%	May-15	4.17%	2.96%	1.21%	May-21	3.33%	2.32%	1.01%
Jun-03	6.21%			Jun-09	6.20%	4.52%	1.68%	Jun-15	4.39%	3.11%	1.28%	Jun-21	3.16%	2.16%	1.00%
Jul-03	6.57%			Jul-09	5.97%	4.41%	1.56%	Jul-15	4.40%	3.07%	1.33%	Jul-21	2.95%	1.94%	1.01%
Aug-03	6.78%			Aug-09	5.71%	4.37%	1.34%	Aug-15	4.25%	2.86%	1.39%	Aug-21	2.95%	1.92%	1.03%
Sep-03	6.56%			Sep-09	5.53%	4.19%	1.34%	Sep-15	4.39%	2.95%	1.44%	Sep-21	2.96%	1.94%	1.02%
Oct-03	6.43%			Oct-09	5.55%	4.19%	1.36%	Oct-15	4.29%	2.89%	1.40%	Oct-21	3.09%	2.06%	1.03%
Nov-03	6.37%			Nov-09	5.64%	4.31%	1.33%	Nov-15	4.40%	3.03%	1.37%	Nov-21	3.02%	1.94%	1.08%
Dec-03	6.27%			Dec-09	5.79%	4.49%	1.30%	Dec-15	4.35%	2.97%	1.38%	Dec-21	3.13%	1.85%	1.28%
Jan-04	6.15%			Jan-10	5.77%	4.60%	1.17%	Jan-16	4.27%	2.86%	1.41%	Jan-22	3.33%	2.10%	1.23%
Feb-04	6.15%			Feb-10	5.87%	4.62%	1.25%	Feb-16	4.11%	2.62%	1.49%	Feb-22	3.68%	2.25%	1.43%
Mar-04	5.97%			Mar-10	5.84%	4.64%	1.20%	Mar-16	4.16%	2.68%	1.48%	Mar-22	3.98%	2.41%	1.57%
Apr-04	6.35%			Apr-10	5.81%	4.69%	1.12%	Apr-16	4.00%	2.62%	1.38%				
May-04	6.62%			May-10	5.50%	4.29%	1.21%	May-16	3.93%	2.63%	1.30%				
Jun-04	6.46%			Jun-10	5.46%	4.13%	1.33%	Jun-16	3.78%	2.45%	1.33%	Average:	12-months		1.14%
Jul-04	6.27%			Jul-10	5.26%	3.99%	1.27%	Jul-16	3.57%	2.23%	1.34%		6-months		1.27%
Aug-04	6.14%			Aug-10	5.01%	3.80%	1.21%	Aug-16	3.59%	2.26%	1.33%		3-months		1.41%
Sep-04	5.98%			Sep-10	5.01%	3.77%	1.24%	Sep-16	3.66%	2.35%	1.31%				
Oct-04	5.94%			Oct-10	5.10%	3.87%	1.23%	Oct-16	3.77%	2.50%	1.27%				
Nov-04	5.97%			Nov-10	5.37%	4.19%	1.18%	Nov-16	4.08%	2.86%	1.22%				
Dec-04	5.92%			Dec-10	5.56%	4.42%	1.14%	Dec-16	4.27%	3.11%	1.16%				

Common Equity Risk Premiums
Years 1926-2021

	<u>Large Common Stocks</u>	<u>Long- Term Corp. Bonds</u>	<u>Equity Risk Premium</u>	<u>Long- Term Govt. Bonds Yields</u>
Low Interest Rates	12.09%	5.28%	6.81%	2.80%
Average Across All Interest Rates	12.33%	6.40%	5.93%	4.92%
High Interest Rates	12.57%	7.52%	5.05%	7.03%

Source of Information: 2022 SBBI Yearbook Stocks, Bonds, Bills, and Inflation

Basic Series Annual Total Returns (except yields)			
Year	Large Common Stocks	Long- Term Corp. Bonds	Long- Term Govt. Bonds Yields
2020	18.40%	15.40%	1.37%
2021	28.71%	-2.66%	1.88%
1940	-9.78%	3.39%	1.94%
1945	36.44%	4.08%	1.99%
1941	-11.59%	2.73%	2.04%
1949	18.79%	3.31%	2.09%
1946	-8.07%	1.72%	2.12%
1950	31.71%	2.12%	2.24%
2019	31.49%	19.95%	2.25%
1939	-0.41%	3.97%	2.26%
1948	5.50%	4.14%	2.37%
1947	5.71%	-2.34%	2.43%
1942	20.34%	2.60%	2.46%
1944	19.75%	4.73%	2.46%
2012	16.00%	10.68%	2.46%
2014	13.69%	17.28%	2.46%
1943	25.90%	2.83%	2.48%
1938	31.12%	6.13%	2.52%
2017	21.83%	12.25%	2.54%
1936	33.92%	6.74%	2.55%
2011	2.11%	17.95%	2.55%
2015	1.38%	-1.02%	2.68%
1951	24.02%	-2.69%	2.69%
1954	52.62%	5.39%	2.72%
2016	11.96%	6.70%	2.72%
1937	-35.03%	2.75%	2.73%
1953	-0.99%	3.41%	2.74%
1935	47.67%	9.61%	2.76%
1952	18.37%	3.52%	2.79%
2018	-4.38%	-4.73%	2.84%
1934	-1.44%	13.84%	2.93%
1955	31.56%	0.48%	2.95%
2008	-37.00%	8.78%	3.03%
1932	-8.19%	10.82%	3.15%
1927	37.49%	7.44%	3.17%
1957	-10.78%	8.71%	3.23%
1930	-24.90%	7.98%	3.30%
1933	53.99%	10.38%	3.36%
1928	43.61%	2.84%	3.40%
1929	-8.42%	3.27%	3.40%
1956	6.56%	-6.81%	3.45%
1926	11.62%	7.37%	3.54%
2013	32.39%	-7.07%	3.78%
1960	0.47%	9.07%	3.80%
1958	43.36%	-2.22%	3.82%
1962	-8.73%	7.95%	3.95%
1931	-43.34%	-1.85%	4.07%
2010	15.06%	12.44%	4.14%
1961	26.89%	4.82%	4.15%
1963	22.80%	2.19%	4.17%
1964	16.48%	4.77%	4.23%
1959	11.96%	-0.97%	4.47%
1965	12.45%	-0.46%	4.50%
2007	5.49%	2.60%	4.50%
1966	-10.06%	0.20%	4.55%
2009	26.46%	3.02%	4.58%
2005	4.91%	5.87%	4.61%
2002	-22.10%	16.33%	4.84%
2004	10.88%	8.72%	4.84%
2006	15.79%	3.24%	4.91%
2003	28.68%	5.27%	5.11%
1998	28.58%	10.76%	5.42%
1967	23.98%	-4.95%	5.56%
2000	-9.10%	12.87%	5.58%
2001	-11.89%	10.65%	5.75%
1971	14.30%	11.01%	5.97%
1968	11.06%	2.57%	5.98%
1972	18.99%	7.26%	5.99%
1997	33.36%	12.95%	6.02%
1995	37.58%	27.20%	6.03%
1970	3.86%	18.37%	6.48%
1993	10.08%	13.19%	6.54%
1996	22.96%	1.40%	6.73%
1999	21.04%	-7.45%	6.82%
1969	-8.50%	-8.09%	6.87%
1976	23.93%	18.65%	7.21%
1973	-14.69%	1.14%	7.26%
1992	7.62%	9.39%	7.26%
1991	30.47%	19.89%	7.30%
1974	-26.47%	-3.06%	7.60%
1986	18.67%	19.85%	7.89%
1994	1.32%	-5.76%	7.99%
1977	-7.16%	1.71%	8.03%
1975	37.23%	14.64%	8.05%
1989	31.69%	16.23%	8.16%
1990	-3.10%	6.78%	8.44%
1978	6.57%	-0.07%	8.98%
1988	16.61%	10.70%	9.19%
1987	5.25%	-0.27%	9.20%
1985	31.73%	30.09%	9.56%
1979	18.61%	-4.18%	10.12%
1982	21.55%	42.56%	10.95%
1984	6.27%	16.86%	11.70%
1983	22.56%	6.26%	11.97%
1980	32.50%	-2.76%	11.99%
1981	-4.92%	-1.24%	13.34%

**Yields for Treasury Constant Maturities
Yearly for 2017-2021
and the Twelve Months Ended March 2022**

<u>Years</u>	<u>1-Year</u>	<u>2-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>
2017	1.20%	1.40%	1.58%	1.91%	2.16%	2.33%	2.65%	2.90%
2018	2.33%	2.53%	2.63%	2.75%	2.85%	2.91%	3.02%	3.11%
2019	2.05%	1.97%	1.94%	1.96%	2.05%	2.14%	2.40%	2.58%
2020	0.38%	0.40%	0.43%	0.54%	0.73%	0.89%	1.35%	1.56%
2021	0.10%	0.27%	0.46%	0.86%	1.19%	1.44%	1.98%	2.05%
Five-Year Average	<u>1.21%</u>	<u>1.31%</u>	<u>1.41%</u>	<u>1.60%</u>	<u>1.80%</u>	<u>1.94%</u>	<u>2.28%</u>	<u>2.44%</u>
<u>Months</u>								
Apr-21	0.06%	0.16%	0.35%	0.86%	1.31%	1.64%	2.20%	2.30%
May-21	0.05%	0.16%	0.32%	0.82%	1.28%	1.62%	2.22%	2.32%
Jun-21	0.07%	0.20%	0.39%	0.84%	1.23%	1.52%	2.09%	2.16%
Jul-21	0.08%	0.22%	0.40%	0.76%	1.07%	1.32%	1.87%	1.94%
Aug-21	0.07%	0.22%	0.42%	0.77%	1.06%	1.28%	1.83%	1.92%
Sep-21	0.08%	0.24%	0.47%	0.86%	1.16%	1.37%	1.87%	1.94%
Oct-21	0.11%	0.39%	0.67%	1.11%	1.40%	1.58%	2.03%	2.06%
Nov-21	0.18%	0.51%	0.82%	1.20%	1.45%	1.56%	1.97%	1.94%
Dec-21	0.30%	0.68%	0.95%	1.23%	1.40%	1.47%	1.90%	1.85%
Jan-22	0.55%	0.98%	1.25%	1.54%	1.70%	1.76%	2.15%	2.10%
Feb-22	1.00%	1.44%	1.65%	1.81%	1.91%	1.93%	2.31%	2.25%
Mar-22	1.34%	1.91%	2.09%	2.11%	2.15%	2.13%	2.51%	2.41%
Twelve-Month Average	<u>0.32%</u>	<u>0.59%</u>	<u>0.82%</u>	<u>1.16%</u>	<u>1.43%</u>	<u>1.60%</u>	<u>2.08%</u>	<u>2.10%</u>
Six-Month Average	<u>0.58%</u>	<u>0.99%</u>	<u>1.24%</u>	<u>1.50%</u>	<u>1.67%</u>	<u>1.74%</u>	<u>2.15%</u>	<u>2.10%</u>
Three-Month Average	<u>0.96%</u>	<u>1.44%</u>	<u>1.66%</u>	<u>1.82%</u>	<u>1.92%</u>	<u>1.94%</u>	<u>2.32%</u>	<u>2.25%</u>

Source: Federal Reserve statistical release H.15

Measures of the Risk-Free Rate & Corporate Bond Yields

The forecast of Treasury and Corporate yields
per the consensus of nearly 50 economists
reported in the Blue Chip Financial Forecasts dated December 1, 2021 and April 1, 2022

Year	Quarter	Treasury					Corporate	
		1-Year Bill	2-Year Note	5-Year Note	10-Year Note	30-Year Bond	Aaa Bond	Baa Bond
2022	Second	1.6%	2.2%	2.4%	2.4%	2.6%	3.7%	4.6%
2022	Third	1.9%	2.4%	2.6%	2.6%	2.8%	4.0%	4.9%
2022	Fourth	2.2%	2.6%	2.7%	2.8%	3.0%	4.2%	5.1%
2023	First	2.5%	2.8%	2.9%	2.9%	3.2%	4.4%	5.3%
2023	Second	2.7%	2.9%	3.0%	3.0%	3.3%	4.5%	5.4%
2023	Third	2.8%	2.9%	3.1%	3.1%	3.3%	4.6%	5.5%
Long-range CONSENSUS								
2023		1.0%	1.3%	1.9%	2.4%	2.9%	3.7%	4.6%
2024		1.6%	1.9%	2.4%	2.8%	3.3%	4.2%	5.0%
2025		2.1%	2.4%	2.8%	3.1%	3.6%	4.5%	5.3%
2026		2.4%	2.6%	2.9%	3.2%	3.7%	4.6%	5.5%
2027		2.5%	2.6%	2.9%	3.2%	3.7%	4.8%	5.6%
Averages:								
	2023-2027	1.9%	2.2%	2.6%	2.9%	3.4%	4.4%	5.2%
	2028-2032	2.4%	2.6%	3.0%	3.3%	3.8%	4.9%	5.7%

Measures of the Market Premium

Value Line Return			
As of:	Dividend Yield	Median Appreciation Potential	Median Total Return
1-Apr-22	1.9%	+ 10.67%	= 12.57%

DCF Result for the S&P 500 Composite				
D/P	(1+5g)	+	g	= k
1.41%	(1.072)	+	14.3%	= 15.81%

Summary		
Value Line		12.57%
S&P 500		15.81%
Average		14.19%
Risk-free Rate of Return (Rf)		3.00%
Forecast Market Premium		11.19%
Historical Market Premium		
Low Interest Rates	(Rm)	(Rf)
1926-2021 Arith. mean	12.09%	2.80%
Average - Forecast/Historical		10.24%

Exhibit 7.8: Size-Decile Portfolios of the NYSE/NYSE MKT/NASDAQ Long-Term Returns in Excess of CAPM
1926–2016

Size Grouping	OLS Beta	Arithmetic Mean	Return in Excess of Risk-free Rate (actual)	Return in Excess of Risk-free Rate (as predicted by CAPM)	Size Premium
Mid-Cap (3–5)	1.12	13.82%	8.80%	7.79%	1.02%
Low-Cap (6–8)	1.22	15.26%	10.24%	8.49%	1.75%
Micro-Cap (9–10)	1.35	18.04%	13.02%	9.35%	3.67%
Breakdown of Deciles 1–10					
1-Largest	0.92	11.05%	6.04%	6.38%	-0.35%
2	1.04	12.82%	7.81%	7.19%	0.61%
3	1.11	13.57%	8.55%	7.66%	0.89%
4	1.13	13.80%	8.78%	7.80%	0.98%
5	1.17	14.62%	9.60%	8.09%	1.51%
6	1.17	14.81%	9.79%	8.14%	1.66%
7	1.25	15.41%	10.39%	8.67%	1.72%
8	1.30	16.14%	11.12%	9.04%	2.08%
9	1.34	16.97%	11.96%	9.28%	2.68%
10-Smallest	1.39	20.27%	15.25%	9.66%	5.59%

Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2016. Historical riskless rate measured by the 91-year arithmetic mean income return component of 20-year government bonds (5.02%). Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.95%) minus the arithmetic mean income return component of 20-year government bonds (5.02%) from 1926–2016. Source: Morningstar *Direct* and CRSP. Calculated based on data from CRSP US Stock Database and CRSP US Indices Database ©2017 Center for Research. Used with permission. All calculations performed by Duff & Phelps, LLC.

Comparable Earnings Approach

Using Non-Utility Companies with

Timeliness of 3 & 4; Safety Rank of 2 & 3; Financial Strength of B+, B++, & A;

Price Stability of 80 to 100; Betas of .65 to .95; and Technical Rank of 3, 4 & 5

Company	Industry	Timeliness Rank	Safety Rank	Financial Strength	Price Stability	Beta	Technical Rank
Altria Group Inc	Tobacco	4	3	B++	85	0.95	3
AMERCO	Trucking	3	2	B++	90	0.95	3
Assurant Inc	Financial Svcs. (Div.)	4	2	A	90	0.90	4
Ball Corp	Packaging & Container	3	2	B++	85	0.95	3
Bio Rad Laboratories Inc	Med Supp Non-Invasive	3	2	A	80	0.75	3
Broadridge Fin'l	Information Services	3	2	B++	95	0.85	4
Chemed Corporation	Diversified Co.	3	2	A	95	0.85	3
CSG Systems International Inc	IT Services	3	3	B+	90	0.75	3
Exponent Inc.	Information Services	3	3	B+	85	0.90	4
F5 Inc.	Telecom. Equipment	3	2	A	80	0.95	3
FTI Consulting Inc	Industrial Services	3	2	A	80	0.70	3
Genex Corp	Auto Parts	3	2	B++	90	0.95	3
Hanover Insurance Group Inc	Insurance (Prop/Cas.)	3	2	A	95	0.95	3
Heartland Express Inc	Trucking	4	2	A	95	0.75	3
Lancaster Colony Corporation	Food Processing	4	2	A	95	0.70	4
ManTech International Corporation	IT Services	3	3	B++	85	0.85	4
Motorola Solutions Inc	Telecom. Equipment	3	2	B++	95	0.90	3
Northwest Bancshares Inc	Thrift	4	3	B+	95	0.95	3
Park National Corp	Bank (Midwest)	3	3	B++	80	0.80	3
Quest Diagnostics Inc	Medical Services	3	2	B++	90	0.80	4
Sensient Technologies Corp	Food Processing	3	2	B++	95	0.90	3
Service Corp International Inc	Industrial Services	3	3	B+	90	0.95	3
Stepan Company	Chemical (Specialty)	4	3	B++	80	0.80	3
Verisk Analytics Inc	Information Services	3	2	B++	100	0.85	3
Waters Corp	Precision Instrument	4	2	A	85	0.95	3
West Pharmaceutical Services Inc	Med Supp Non-Invasive	3	2	A	80	0.80	3
Western Union Company	Financial Svcs. (Div.)	4	3	B+	95	0.80	4
Average		3	2	B++	89	0.86	3
Water Group	Average	3	3	B++	89	0.77	4

Source of Information: Value Line Investment Survey for Windows, April 2022

Comparable Earnings Approach
Five -Year Average Historical Earned Returns
for Years 2017-2021 and
Projected 3-5 Year Returns

Company	2017	2018	2019	2020	2021	Average	Projected 2025-27
Altria Group Inc	42.5%	51.0%	NMF	NMF	NMF	46.8%	NMF
AMERCO	9.0%	10.0%	7.0%	12.6%	19.5%	11.6%	10.5%
Assurant Inc	12.2%	4.9%	6.8%	7.4%	9.0%	8.1%	6.5%
Ball Corp	7.7%	13.1%	19.2%	17.9%	24.2%	16.4%	27.5%
Bio Rad Laboratories Inc	2.2%	4.4%	3.7%	3.2%	10.0%	4.7%	6.5%
Broadridge Fin'l	32.6%	46.1%	49.1%	43.7%	36.8%	41.7%	35.5%
Chemed Corporation	26.1%	33.9%	31.7%	32.9%	49.5%	34.8%	32.0%
CSG Systems International Inc	17.9%	18.3%	20.9%	13.9%	16.5%	17.5%	22.0%
Exponent Inc.	14.3%	23.0%	23.5%	22.8%	25.5%	21.8%	29.0%
F5 Inc.	34.2%	35.3%	24.3%	13.8%	14.0%	24.3%	16.0%
FTI Consulting Inc	7.6%	11.4%	14.8%	15.9%	16.0%	13.1%	10.5%
Gentex Corp	18.0%	23.5%	21.9%	17.7%	18.3%	19.9%	27.0%
Hanover Insurance Group Inc	6.8%	9.9%	11.4%	11.1%	11.4%	10.1%	10.5%
Heartland Express Inc	7.4%	11.8%	10.7%	9.8%	11.0%	10.1%	10.0%
Lancaster Colony Corporation	20.0%	20.7%	20.7%	17.5%	16.9%	19.2%	15.5%
ManTech International Corporation	4.7%	5.9%	7.6%	7.6%	8.0%	6.8%	8.5%
Motorola Solutions Inc	-	-	-	-	-	-	NMF
Northwest Bancshares Inc	7.6%	8.4%	8.2%	4.9%	9.7%	7.8%	9.5%
Park National Corp	11.3%	13.3%	10.6%	12.3%	13.9%	12.3%	11.5%
Quest Diagnostics Inc	16.2%	16.8%	15.9%	22.6%	26.3%	19.6%	17.0%
Sensient Technologies Corp	17.7%	18.3%	14.2%	11.7%	13.0%	15.0%	13.0%
Service Corp International Inc	21.2%	20.4%	19.4%	29.8%	315.5%	81.3%	13.5%
Stepan Company	12.4%	14.4%	11.6%	12.9%	14.0%	13.1%	13.0%
Verisk Analytics Inc	28.8%	28.9%	19.9%	26.4%	25.0%	25.8%	24.0%
Waters Corp	27.0%	39.9%	-	NMF	NMF	33.5%	29.0%
West Pharmaceutical Services Inc	11.8%	14.8%	15.4%	18.7%	26.0%	17.3%	18.0%
Western Union Company	-	-	-	NMF	NMF	-	NMF
Average						21.3%	17.3%
Median						17.3%	14.5%
Average (excluding companies with values >20%)						13.1%	11.2%

Comparable Earnings Approach

Screening Parameters

Timeliness Rank

The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

Safety Rank

A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

Financial Strength

The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

Price Stability Index

An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

Beta

A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

Technical Rank

A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.